REVIEWS OF RECENT BOOKS.

Von Lundborg, DR. H. *Medizinisch-biologische Familien Forschungen innerhalb eines 2232 Köpfigen Bauerngeschlechtes in Schweden (Provinz Blekinge).* Jena; 1913. G. Fischer; 120 M.; 2 vols 4to.; pp. xvi. + 520 + 220, together with 7 maps, 10 plates, and 50 tables of pedigrees.

IN the south of Sweden, in the province of Blekinge, there juts into the Baltic a small peninsula, once an island, about ten miles square. It is called Listerland, and on it there lives a people who in some ways are different from the people generally inhabiting Sweden. As a stock they are physically darker and more brachycephalic. Over Sweden generally the percentage of brachycephalics is 13·0; in Listerland it is 27·6. Over Sweden generally the proportions of light eyes (blue or grey), mixed, and brown eyes are 66·7 per cent.: 29·8 per cent.: 4·5 per cent.; in Listerland these classes are as 47·6 per cent.: 40 per cent.: 12·4 per cent. Brown eyes and brachycephalic skulls are far more common among the people of Listerland. In temperament also these people differ from those of the rest of Sweden. They are a nervous race, more quarrelsome than most Swedish folk, conservative and superstitious, often good looking, often drunken, much given to religion and sexual irregularities. Moreover, many of them are affected by nervous disorders of a "degenerative" type. It was the report of a rare nervous disease, which turned out to be myoclonic epilepsy, that first took Dr. Lundborg to Listerland in 1898. His visits led him to realise the opportunities offered by this semi-isolated community for careful medical and biological study, and the result of four years spent among them in 1908-1912 is the present monograph. It is an exhaustive and apparently a most careful and accurate piece of work. The author has followed the history of certain families in the community extending over two centuries and involving over 2,000 individuals, and with the help of the existing ecclesiastical and civil records he has compiled full family histories and pedigrees. The worked-up data alone extend over 336 pages and 50 large folding plates of pedigrees, but the whole is so carefully arranged that reference from plates to text, and *vice versa*, is rendered an easy matter. Perhaps the most definite results obtained are those concerning the inheritance of two nervous diseases, myoclonic epilepsy and dementia præcox. Myoclonic epilepsy is a rare disease, but in this small community there were no less than nine families in which one or more members were affected. Altogether these nine families contained 74 individuals, of whom 20 died young and 17 were diseased. In every case both parents were normal. There seems little doubt but that the author is right in stating that the affection behaves as a simple Mendelian recessive, and the conclusion is supported by the case of two affected women married to normal men. Between them they had ten children, who grew up, and all of them were quite free from the affection.

The evidence for dementia præcox is more extensive, and likewise indicates that this affection also behaves as a simple Mendelian recessive. Reckoning only children over 15 years of age, Lundborg obtained the following results:—

No. of Families	Nature of Mating.	Children over 15. Normal.	Affected.
11	Normal × affected (DD × RR)	44	—
5	,, × ,, (DR × RR)	20	20
11	Normal × normal (DR × DR)	53	24

The results are clearly in keeping with the idea that the affection behaves as a Mendelian recessive. It should be mentioned that cousin marriages are frequent in the community, a condition which is, of course, favourable to the appearance of the recessive form. The numbers of the affected individuals indicates a high proportion of heterozygotes among

the normals, and it is possible that this may be connected with the unusually nervous condition of the community as a whole.

The author has some interesting paragraphs on criminal tendencies, in which he suggests that phenomena such as drunkenness, lawlessness, child murder, assault, prostitution, etc., may be more prevalent in certain stocks than in others. Inside the community studied by him there was one line exhibiting an unusually high proportion of these undesirables, and a special pedigree is given to show how they recur over generation after generation in this line. Of even greater interest is the fact that an unusually high proportion of the members of this line had dark hair and brown eyes. Indeed, this correlation of pigmentation with temperament is so interesting that one cannot help regretting that the author did not attempt to bring it into relation with other temperamental characters.

We have dealt chiefly with those parts of the work which are more especially of eugenic interest. But in a volume of 740 large quarto pages there is room for much else, and the work is a veritable encyclopædia of the history, manners, and vices of the folk of Listerland, and constitutes an elaborate evaluation of this community as compared with those of other parts of Sweden.

As regards general get up and typography the book is highly to be commended, but it would conduce greatly to the comfort of those who read such works if the top edges were ploughed smooth instead of being left uncut.

R. C. PUNNETT.

Pigou, A. P. *Wealth and Welfare.* London. Macmillan and Co.; 1912; price 10s.; pp. 488.

POLITICAL economy, like almost every other branch of knowledge, has its bearing upon eugenics. It does not often happen, however, that a contribution to political economy contains so much of immediate interest to eugenists as does Professor Pigou's last book; the fourth chapter, which is headed "The National Dividend and the Quality of the People," is one that would be read with profit by all who profess a serious interest in eugenics.

In the second chapter Professor Pigou comes to the following conclusion: other things being equal, a general increase in the national dividend, a change in the distribution of the dividend favourable to the poor, and a "steadying" of the dividend, particularly of that part of it which goes to the poor, would all be likely to increase economic welfare, and, through economic welfare, general welfare. He then proceeds to enquire what bearing, if any, recent advances in biological knowledge have upon these conclusions. His treatment of the question is as follows.

Biological knowledge has advanced so far as to warrant the belief that general welfare and economic welfare alike could be increased by measures restricting propagation among the obviously degenerate. This belief, however, is additional to and does not disturb the conclusions mentioned above. There are three further arguments that are sometimes produced as based upon modern biological knowledge which might be held to invalidate these conclusions. In the first place economic inquiries are concerned with the environment, which, it is said, are of little importance compared with the dominant part played by heredity. To this Professor Pigou replies that, no matter what the nature of the stock is, it is important that the best and not the worst should be made of it by the environment. He lays much greater stress, however, upon another point which is only too often forgotten when these problems are discussed. "The environment of one generation can produce a lasting result, because it can effect the environment of future generations. Environments, in short, as well as people, have children" (p. 59). In this way a change in the environment can produce a permanent change for the better, because the improved environment is handed down to